# The National Oil and Hazardous Substances Pollution Contingency Plan PREVENT PREPARE - RESPONDED The National Oil and Hazardous Substances Pollution Contingency Plan

#### Subpart J Product Schedule

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# BIOREMEDIATION AGENTS

- Microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge
- Bioremediation agents are typically used as a polishing step after conventional mechanical cleanup options have been applied



## DISPERSANTS

- Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column
- These products <u>should not</u> be confused with surface washing agents

#### Conditions that Affect the Use of Dispersants on Oil Spills

#### Favorable Conditions:

- Higher water temperatures and salinity
- High waves prevent booms and skimmers from working effectively
- Offshore dispersal for industrial and municipal water intake protection
- Prevent oiled seabirds and marine mammals
- Sea dispersal can protect inshore breeding grounds
- Prevent "mousse" or emulsion formations
- To protect mangroves, coral reefs, salt marshes, sea grasses, and other sensitive areas
- To prevent spill from reaching marinas, harbor facilities, aquaculture operations, shellfish harvesting operations, tourist beaches, and other

#### **Unfavorable Conditions:**

- Very large oil spills (if used as the only response tool)
- Cold water temperatures
- Calm seas
- Strong winds
- Lack of adequate equipment or trained personnel
- Small window of opportunity
- Weathered oil, high pour point, high viscosity
- Freshwater
- Near shore shallow waters and intertidal zones
- Lighter gasoline's and fuel oils due to high evaporation rates
- Confined harbors or bays
- Toxicity to native species. May effect the taste



## SURFACE WASHING AGENTS

- Any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column
- Surface washing agents are those where the released oil is not dispersed but readily floats on the water surface and is recoverable. Thus, the washwater from these products should not be flushed into waterbodies, but should be contained, recovered, and properly treated



# SURFACE COLLECTING AGENTS

- There are no products under this category
- The U.S. EPA may eliminate this category and incorporate future products under miscellaneous oil spill control agents

### MISCELLANEOUS OIL SPILL CONTROL AGENTS

- Any product, other than a dispersant, sinking agent, surface washing agent, surface collecting agent, bioremediation agent, burning agent, or sorbent that can be used to enhance oil spill cleanup, removal, treatment, or migration
- Products include: emulsifiers, elastizers, chemical based sorbents, solidifiers, and mixed

### Sorbents

- Essentially inert and insoluble materials that are used to remove oil from water or solid surfaces through adsorption, in which the oil is attracted to the sorbent surface and then adheres to it; absorption, in which the oil penetrates the pores of the sorbent material
- Sorbents are generally not required to be listed under the Product Schedule
- Sorbents that contain chemical or biological components, especially when made in loose form, may be required to be listed

## AUTHORITY TO USE PRODUCTS

- Regional Response Teams (RRTs) and Federal On-Scene Coordinators (U.S. EPA and U.S. Coast Guard make the decisions regarding Alternative Countermeasure use
- There is no federal mandate to use products on the schedule, however, RRTs shall address, as part of their planning activities, the desirability of using appropriate products

## HOW DO YOU GET ON THE LIST?

- General: Material Safety Data Sheets, Screen for Heavy Metals, Screen for Chlorinated Hydrocarbons, Toxicity tests (except for bioremediation agents)
- Bioremediation Agents: Screen for Pathogens, 28-day Effectiveness Test
- Dispersants: Swirling Flask Test,
   Dispersant Effectiveness Test

# FOR MORE INFORMATION

- Oil Spill Program Web Site at www.epa.gov/oilspill; or call William Nichols at 703-603-9918
- (703) 603-8760 Oil Program Center









